

COCONINO COUNTY

**STORMWATER
MANAGEMENT PROGRAM
(SWMP)**

**Small Municipal Separate Storm Sewer (SMS4)
General Permit (AZG2002-002)**

**Public Works/Community Development
Hydrology Section
March 10, 2003**

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Introduction

Flagstaff is a fast growing community consisting mostly of residential areas and businesses with limited industry and has a population of approximately 54,000. The Flagstaff urbanized area, which includes much of the area within the city limits as well as some residential areas immediately adjacent to the city, has been designated by the ADEQ as a Small Municipal Separate Storm Sewer System (SMS4). Within the Flagstaff urbanized area, eleven subareas (Table 1.0 and Figure 1.0) comprised of 21 discrete SMS4s (Figure 1.0) have been designated as falling under the jurisdiction of Coconino County for development and implementation of a stormwater management program (SWMP).

The SWMP for Coconino County consists of the development of Best Management Practices (BMP), measurable goals and target dates for achievement and implementation of 1) public education and outreach; 2) public involvement and participation; 3) illicit discharge detection and elimination; 4) construction site runoff control; and 6) pollution prevention and good housekeeping for County operations.

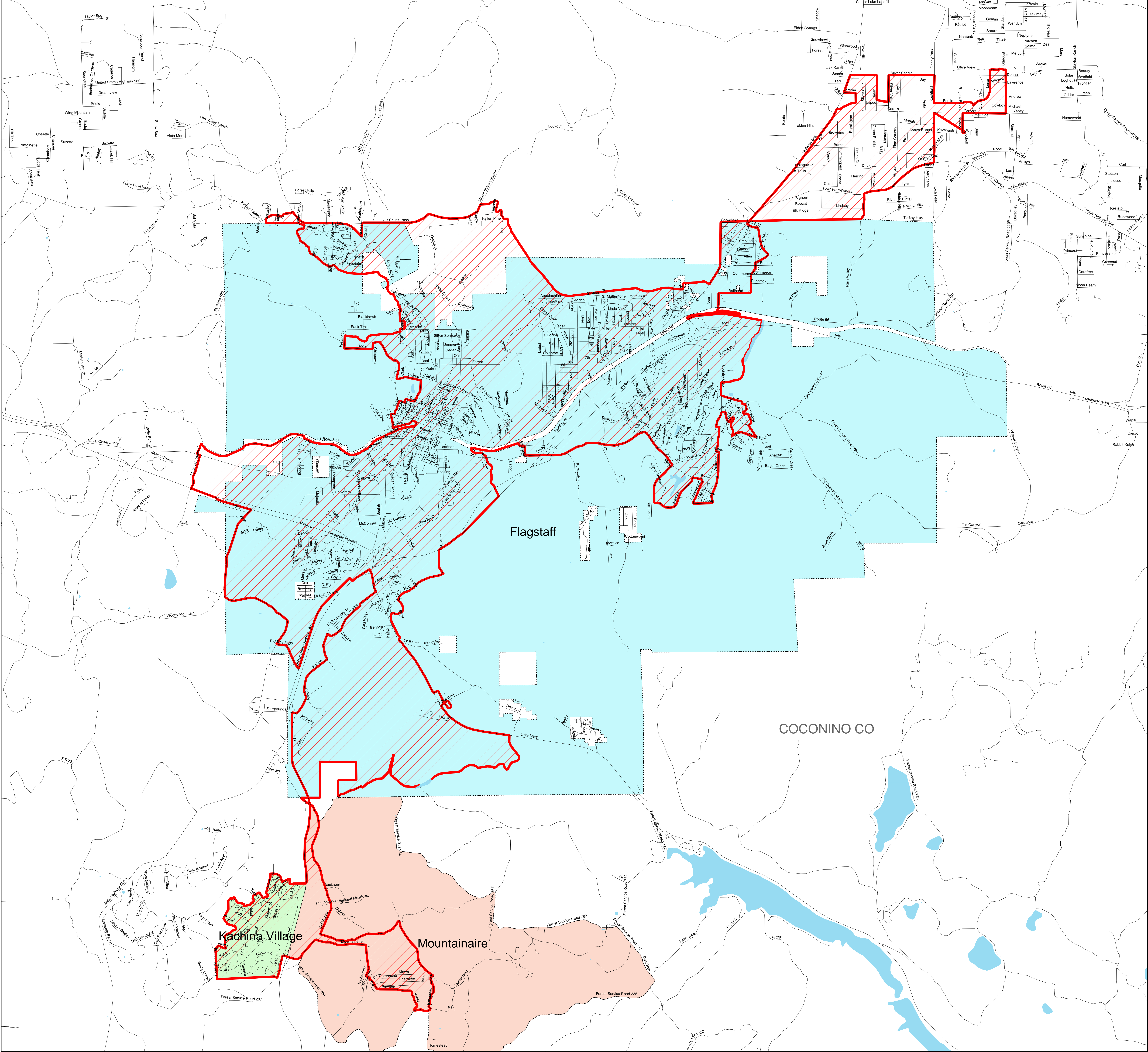
This SWMP constitutes Coconino County's compliance with ADEQ's general permit (AZG2002-002) for the discharges of Stormwater into and from the County's SMS4s. Coconino County desires to discharge under the aforementioned permit and thus has completed the Notice of Intent (NOI) and this SWMP in accordance with Part III and Part V of the permit. Coconino County intends to fully implement the conditions in this SWMP no later than December 19, 2007.

Stormwater Management Program

Coconino County has evaluated the permit requirement for the six minimum control measures specified in Part V.B. of the general permit. Based on the review of these measures, the County has selected BMP's for each control measure that the County believes will accomplish the goal of reducing pollution from stormwater runoff to the maximum extent practicable (MEP). The County has identified dates by which implementation of each BMP will begin, targeted completion dates for full implementation/achievement of each BMP, and defined the measurable goals and the responsible persons for each action. The above referenced information is presented in a series of tables which show permit conditions and plan components for each control measure.

Table 1.0
Eleven General Subareas Containing the 21 Discrete County SMS4s

<u>I.D. No.</u>	<u>Location Description</u>	<u>Land Use</u>
1.	Townsend/Winona and Doney Park SMS4	Residential and Business
2.	*(3) discrete SMS4s at the Colony and Jo Don Trailer Courts	Residential
3.	1 SMS4 off of Railhead Ave.	Business and Industrial
4.	*(9) discrete SMS4s in Mobile Haven	Residential
5.	Lockett Ranches/Elden Lookout Road SMS4	Residential
6.	Blue Willow Drive and Doves Nest Lane SMS4	Residential
7.	Hidden Hollow Road/Garret Lane SMS4	Residential
8.	1 SMS4 between N. Kittredge Lane and N. Hereford Drive	Residential
9.	1 SMS4 between Flagstaff Ranch Road and Hidden Hollow Trailer Court	Residential and Business
10.	Dunnam Street and Kaibab Lane SMS4	Residential and Business
11.	Mountain Dell SMS4	Residential
	*Multiple discrete SMS4s within same general subdivision or area	



Flagstaff, AZ Urbanized Area Storm Water Entities as Defined by the 2000 Census

2000 Census Urbanized Areas

 Flagstaff, AZ

 Municipal Boundaries

 County Boundaries

 Major Waterbodies

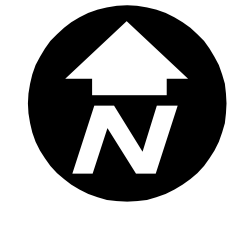
 Roads

SOURCE:
US Census Bureau TIGER data, 2000 Census

PROJECTION:
State Plane Coordinate System - Arizona Central,
Horizontal datum - NAD83

MAP DESIGN:
August 9, 2002

0 1 Miles
0 1 Kilometers



1. Public Education and Outreach on Stormwater Impacts

TABLE 1.1 Public Education and Outreach: BMPs and Measurable Goals				
Permit Condition	BMP	Measurable Goal(s)	Start Date	Target Date Achievement
Part V.B.1.a.	Collect brochures, fact sheets, and other educational materials from federal, state, city and other MS4 web sites.	<ul style="list-style-type: none"> County staff will partner with the City of Flagstaff in contacting agencies and will review their web page semiannually to ensure that current information is available. County staff will review the City of Flagstaff's web page on a quarterly basis to determine if any pertinent, new information is available from the City's quarterly searches. 	5/03	12/07
Part V.B.1.a.	Distribute information to the general public and to County employees.	<ul style="list-style-type: none"> Annually, County staff will partner with the City of Flagstaff in writing stormwater articles for publication in the City Scape. Annually, County staff will write a stormwater article in the County Connector. Since there are so few businesses and industrial complexes in the County SMS4s, information pamphlets will be hand delivered to each business and industrial plant. 	5/03	12/07
Part V.B.1.a.	Establish a Stormwater web page	<ul style="list-style-type: none"> County staff will develop a Stormwater page on the County web page and bring it on line. County staff will update the web page as necessary. 	4/04	10/04

Part V.B.1.a.	Establish brochures and/or pamphlets providing relevant Stormwater information.	<ul style="list-style-type: none"> County staff will collect or develop educational Stormwater materials. The Stormwater materials will be made available at the Public Works, Community Development and Administration offices. County staff will update these materials as needed and redistribute. 	7/04	12/07
Part V.B.1.a.	Conduct Stormwater review and training meeting for the appropriate County staff.	<ul style="list-style-type: none"> Annually review any changes to the County SWMP, any areas of concern based on visual inspections of the County SMS4s and any construction sites therein with the County road maintenance supervisors, the engineering manager, the septic system inspectors and other Community Development staff. 	12/03	12/07
Part V.B.1.a.	Respond to verbal or written public inquiries, comments and concerns regarding the County SWMP, illicit discharges and disposal of waste.	<ul style="list-style-type: none"> All Stormwater related public inquiries will be routed to the County Community Development office where County staff will determine the best way to respond. Appropriate responses may include providing information via the County Stormwater web page, via phone, through email or mail, and performing SMS4 site inspections 	4/04	12/07

1. Public Education and Outreach on Stormwater Impacts

Table 1.2
Public Education and Outreach: Additional Information

Permit Citation	Plan
Part V.B.1.b.i.	An education and outreach program will be developed and the information disseminated to the general population in the County SMS4s, school groups via the City of Flagstaff's outreach program, and to specific targeted audiences such as residential developers and contractors, businesses and industries, County road maintenance, engineering, and inspection staff as well as other County employees. The principal objectives of the education and outreach program are: 1) to communicate the hazards of illegal dumping and illicit discharges to water quality, aquatic ecosystems, to flood conveyance, and to the public health and safety; 2) to emphasize the importance of proper disposal of the many household products were use and to increase public awareness as to their hazardous nature; 3) to communicate the importance of construction site management in protecting water quality and reducing sediment and erosion problems; 4) to communicate pollution prevention strategies and controls on construction sites; 5) to communicate the existence of County ordinances or the additional development of County ordinances to protect the quality of Stormwater runoff; and 6) to give the public an opportunity to provide input into the development and implementation of a plan to protect the quality of their water resources.
Part V.B.1.b.ii.	Methods employed to disseminate information on improper disposal of wastes, the hazardous nature of the wastes and the impacts Stormwater discharge and receiving streams, include partnering with the City of Flagstaff to publish articles in a local paper, the acquisition or development of pamphlets and other publications to be distributed at three County offices, the development of a County Stormwater web page, County training, the County newspaper, and the outreach/training programs being conducted by the City of Flagstaff.
Part V.B.1.b.iii.	The targeted audiences were selected because they include all who either live within, work within, or would likely be involved with any construction within the County SMS4s. The general population will be made aware of the hazards of improper disposal of chemicals and household products, including but not limited to paint, solvents, pesticides, antifreeze and motor/transmission oil, and animal wastes. Stormwater hazards communicated to residential developers and contractors, businesses and industries will include all of the above plus paper and portable toilet waste, hydraulic fluid, concrete waste, sedimentation and erosion. County staff will be appraised of all of the above referenced hazardous products and the proper disposal of such.
Part V.B.1.b.iv.	At the end of the five year permit term, the County's Stormwater education/outreach program in partnership with the City of Flagstaff's program is expected to reach an audience of approximately 50,000 people. Because there is out-of-town ownership of homes in some of the County SMS4s, it is expected that 80% of residential owners will have received or heard some of the educational information concerning protecting Stormwater quality. It is expected that 80% of the construction/development community and 100% of the businesses and industrial complexes in the County SMS4s will have received educational information concerning illicit discharges and the protection of Stormwater quality.

Part V.B.1.b.v. & vi.	A list of measurable goals, dates activities are scheduled to begin, and dates goals are expected to be achieved are presented in Table 1.1
Part V.B.1.b.vii.	The County Hydrologist, Ted Smith, has the principal responsibility for coordinating and implementing the educational activities. He may delegate part or all of this responsibility to other County staff.

2. Public Involvement/Participation

Table 2.1 Public Involvement/Participation: BMPs and Measurable Goals				
Permit Condition	BMP	Measurable Goal(s)	Start Date	Target Date Achievement
Part V.B.2.a.	Provide an opportunity for public involvement in the development of the SWMP for the County SMS4s.	<ul style="list-style-type: none"> A one-time mailing concerning the County SWMP and the further development of the SWMP. Mail pamphlet will encourage public input in the SWMP development stage as well as the implementation stage. An initial meeting will be conducted at the County Administration building. Subsequent communications will be done via phone, internet, letters or additional meetings, if warranted 	10/03	4/04
Part V.B.2.a.	Encourage the formation of Adopt-a-Wash Reach groups and/or rainfall measurement groups.	<ul style="list-style-type: none"> County staff will encourage the formation of volunteer groups for cleaning trash from washes and/or measuring rainfall. Volunteers may include youth as well as adults. The volunteer groups will be encouraged to operate through the permit term. The County will encourage the adoption of one SMS4 wash reach and/or one rainfall gage per year. 	6/04	12/07
Part V.B.2.a.	Respond to verbal or written public inquiries, comments and concerns regarding the County SWMP, illicit discharges and disposal of waste.	<ul style="list-style-type: none"> All Stormwater related public inquiries will be routed to the County Community Development office where County staff will determine the best way to respond. Appropriate responses to the public inquiries may include providing information via the County Stormwater web page, via phone, through email or mail, and performing SMS4 site inspections. 	4/04	12/07

Part V.B.2.b.	Compliance with state and local public notice requirements when implementing public involvement.	<ul style="list-style-type: none"> Discussed in first BMP in this table. The NOI for coverage of discharges from County SMS4s and the SWMP will be made available for public review at the Public Works, Community Development and Administration offices and on the County Stormwater web page once it is completed. 	3/03	12/07
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2. Public Involvement/Participation

Table 2.2 Public Involvement/Participation: Additional Information	
Permit Citation	Plan
V.B.2.c.i.	The County has established procedures for making the public aware of involvement and participation opportunities typically concerning road improvement and/or drainage projects. Public notifications may be accomplished via mass mailings, newspaper notices or the County web page. Public Stormwater meetings can be arranged at the Administration office and all relevant comments will be considered.
V.B.2.c.ii.	The County will provide opportunities for public involvement by encouraging Adopt-a-Wash Reach and/or rain gage monitoring programs. The programs have the potential of involving a range of age groups from youth to adults and may involve businesses, homeowner's associations and university or school students. The Adopt-a-Wash Reach program would focus on trash removal in the washes and the detection of any illicit discharges. The rainfall monitoring program would provide valuable spatial information on rainfall intensities and total rainfall.
V.B.2.c.iii.	The County's principal approach for handling public stormwater comments is described in the measurable goals section of Table 2.1. In addition, the Stormwater web page will provide information on contacting the County and submitting comments. The review and response effort on the part of the County to Stormwater public comments will be a function of the relevancy and technical merits of the comments. Mass mailings or egrams with the same repetitive comments will not be responded to individually.
V.B.2.c.iv.	The NOI and the SWMP will be available to the general public on the County Stormwater web page once it is established. In addition copies of the NOI and SWMP will be made available for public review at the Public Works, Community Development and Administration offices.
V.B.2.c.v. & vi.	A list of measurable goals, dates activities are scheduled to begin, and dates goals are expected to be achieved are presented in Table 2.1.
V.B.2.c.vii.	The County Hydrologist, Ted Smith, has the principal responsibility for coordinating and implementing the public involvement/participation activities. He may delegate part or all of this responsibility to other County staff.

3. Illicit Discharge Detection and Elimination

Table 3.1 Illicit Discharge Detection and Elimination: BMPs and Measurable Goals				
Permit Citation	BMP	Measurable Goals	Start Date	Target Date Achievement
Part V.B.3.a. & c.	Develop, implement and enforce a program to detect and eliminate illicit discharges into SMS4s.	<ul style="list-style-type: none"> County staff will research and review existing Stormwater ordinances at cities and other counties to determine the structure, content and enforcement procedures used. 	6/03	10/03
		<ul style="list-style-type: none"> Public input into the development of the ordinance will be encouraged as part of the public involvement/participation program previously described in Tables 2.1 and 2.2. 	10/03	1/04
		<ul style="list-style-type: none"> The County will adopt the new ordinance, which shall be called the Illicit Discharge Stormwater Ordinance and will implement it. 	4/04	12/07
		<ul style="list-style-type: none"> The Illicit Discharge Stormwater Ordinance will be incorporated into the County grading and drainage design criteria. 	5/04	6/04
		<ul style="list-style-type: none"> The Illicit Discharge Stormwater Ordinance will at a minimum address identification of violators through inspections and complaints, the notification of violators, enforcement and punitive measures to be taken, and allowable non-Stormwater discharges. 	6/04	12/07

Part V.B.3.f.	County staff will inspect the SMS4 outfalls once before the summer monsoon season and once in the fall during dry weather to identify illicit discharges and illegal dumping. The inspections will include qualitative field tests and sampling, if warranted. If discharges or dumps are found, an attempt will be made within 15 days to identify the source and punitive measures will be enforced to eliminate the problem.	<ul style="list-style-type: none"> County staff will develop inspection criteria to be followed and will maintain a database to document inspection dates, locations and the results of the inspections. County staff will inspect at least one outfall in each of the 11 SMS4s identified in Table 1.0 on a semiannual basis. In those SMS4s with more than one outfall, a different outfall will be inspected every six months. 	4/05	12/07
			6/05	12/07
			6/05	12/07

3. Illicit Discharge Detection and Elimination

Table 3.2 Illicit Discharge Detection and Elimination: Additional Information	
Permit Citation	Plan
V.B.3.g.i.	County staff will conduct dry weather inspections of SMS4 outfalls on a semiannual basis. County staff will also conduct periodic inspections of the principal channel reaches transgressing the SMS4s. The inspections will be for the purpose of identifying illicit discharges and illegal dumping and public volunteers will be encouraged to participate.
V.B.3.g.ii.	The County will need to develop the authority to prohibit illicit discharges, through a proposed Ordinance. The Illicit Discharge Stormwater Ordinance will need to address the County's legal jurisdiction, allowable non-Stormwater discharges versus illicit discharges; best management practices to be followed by the public, businesses, contractors and industry; identification procedures; the process to be followed when an illicit discharge is identified; the structuring of fines and clean up responsibilities; and public input. The County anticipates developing the Illicit Discharge Stormwater Ordinance by the end of the first year of this permit.
V.B.3.g.iii.	The County will enforce against illicit discharges that occur within the boundaries of 21 discrete SMS4s shown on Figure 1 and described by 11 subdivisions or street names in Table 1. More detailed maps of the boundaries will be developed by the County during the first year of this permit. The county will discuss and compare ideas regarding the Ordinance with the City of Flagstaff as they will be developing their own Ordinance concurrently.
V.B.3.g.iv. & v.	The County considers the discharges listed in Part I.C.2. of the General Permit to be allowable non-Stormwater discharges. These discharges will be allowed to the SMS4s under County jurisdiction unless, in the County's opinion, the volumes and/or the frequencies of the discharges constitute unacceptable levels of chemical or sediment loading to the receiving stream.
V.B.3.g.vi.	Methods for informing/training County employees about illicit discharges will include information on the County Stormwater web page, articles or information developed by the County or other agencies and provided in County offices, articles in the County Recorder, and annual meetings with the appropriate inspection staff engineers and road maintenance supervisors.
V.B.3.g.vii.	The County will follow the public outreach and education programs described in Tables 1.1, 1.2, 2.1 and 2.2 of this SWMP.
V.B.3.g.viii. & ix.	A list of measurable goals, dates activities are scheduled to begin, and dates goals are expected to be achieved are presented in Table 3.1.
V.B.3.g.x.	The County Hydrologist, Ted Smith, has the principal responsibility for coordinating and implementing the illicit discharge detection and elimination activities. He may delegate part or all of this responsibility to other County staff.

4. Construction Site Stormwater Runoff Control

Table 4.1 Construction Site Stormwater Runoff Control: BMPs and Measurable Goals				
Permit Citation	BMP	Measurable Goal(s)	Start Date	Target Date Achievement
Part V.B.4.a. & b.	The County currently requires a grading permit for land disturbances of 50 cubic yards or more; however, the grading permits do not include all the requirements of a Stormwater Pollution Prevention Plan (SWP3) and principally focus on erosion and sedimentation rather than all pollutants and waste products. The County will develop a Construction Site Stormwater Ordinance which provides for pre-construction site plan reviews, the control of sediment and all other wastes which could potentially impact water quality, and site inspections and penalties to ensure that BMPs are properly installed and maintained.	<ul style="list-style-type: none"> County staff will research and review existing construction Stormwater ordinances at cities and other counties to determine the structure, content and enforcement procedures used. 	3/03	4/04
		<ul style="list-style-type: none"> Public input into the development of the ordinance will be encouraged as part of the public involvement/participation program previously described in Tables 2.1 and 2.2. 	4/04	12/04
		<ul style="list-style-type: none"> The County will adopt the Construction Site Stormwater Ordinance and it shall be incorporated into the Stormwater Master Plan and into the County grading and drainage design criteria. 	12/04	3/05
		<ul style="list-style-type: none"> The County will undertake construction site inspections as provided for in the Construction Site Stormwater Ordinance and enforcement actions will be taken with violators. 	12/04	12/07

Part V.B.4.c.	The County will consider the site plan to be the SWP3 for the operator and review it accordingly for completeness. The County will develop a checklist to be used in verifying the completeness of SWP3 plans. The County will call the operator to confirm that the SWP3 is in compliance with the Construction Site Stormwater Ordinance and follow this with a form letter documenting the phone contact and that the site BMPs are appropriate.	<ul style="list-style-type: none"> • The County will research technical guidance measures for the maintenance and control of erosion and sediment as well as other strategies to control construction site waste. • The County staff will develop a checklist for SWP3 completeness that is consistent and inclusive of all the Construction Site Stormwater Ordinance language. The checklist developed will incorporate the checklist items specified in ADEQ's Construction General Permit. 	<p>3/03</p> <p>4/04</p>	<p>4/04</p> <p>12/04</p>
Part V.B.4.d.	The County Construction Site Stormwater Ordinance language will provide for the authority to inspect construction sites and enforce control measures.	<ul style="list-style-type: none"> • The County will maintain a database which will contain dates of site inspections, locations of sites, adequacy and maintenance of BMP controls, and any enforcement actions taken. 	12/04	12/07

4. Construction Site Stormwater Runoff Control

<p style="text-align: center;">Table 4.2 Construction Site Stormwater Runoff Control: Additional Information</p>	
Permit Citation	Plan
Part V.B.4.e.i.	The County will continue to enforce their in-place Grading and Excavation Ordinance that specifically addresses erosion and sediment control at construction sites disturbing more than 50 cubic yards of material. The county proposes to develop a Construction Site Stormwater Ordinance that will become part of a master Stormwater plan. The Construction Site Stormwater Ordinance will include: 1) pre-construction site plan review authority; 2) criteria for evaluating the completeness of SWP3s; 3) criteria for determining the suitability of BMPs; 4) criteria for the clean up of site spills and waste; 5) site inspection authority; and 6) enforcement actions including warnings, fines and the enforcement of these sanctions. The County anticipates needing approximately 1.7 years for the development of Construction Site Stormwater Ordinance. A portion of this time will be devoted to reviewing existing ordinances that other counties and cities may have in place and reviewing public input.
Part V.B.4.e.ii.	The County Grading and Excavation Ordinance provides for pre-construction plan reviews, erosion and sedimentation control, site inspections during construction, the correction of violations and fines. The sanctions and enforcement mechanisms for the proposed Construction Site Stormwater Ordinance are presented above in Part V.B.4.e.i.
Part V.B.4.e.iii.	<p>A schedule for completing the Construction Site Stormwater Ordinance is presented in Table 4.1. The County will prioritize the inspection of construction sites in their SMS4s based on: 1) the presence of higher order channels; 2) the proximity of the construction sites to these channels; and 3) the presence of businesses and industry in the immediate proximity of the construction sites.</p> <p>Prior to the completion of the Construction Site Stormwater Ordinance, site inspections conducted by the County will typically include: 1) a review of the SWP3 plan; 2) walking the perimeter and/or checking the outfalls from the site for signs of waste and sediment; 3) an inspection of any installed BMPs; and 4) communication with the operator concerning compliance status. Site plan reviews will include: 1) pre- and post-construction drainage and the amount of additional runoff generated; 2) if detention ponds will be employed; 3) an assessment of final flow velocities and their erosion potential; 4) whether any part of the site will be in the 100-year floodplain; 5) if flow models have been used, the reasonableness of the input parameters; 6) the BMPs used and their appropriateness for controlling erosion and sedimentation and minimizing pollution; 7) a formal meeting with the operator; and 8) consideration of any public comments.</p>
Part V.B.4.e.iv.	At present the County employs mass mailings to all potentially affected people when extensive road repair or improvement districts are being proposed. Subdivision review committee meetings are employed for new developments. Anyone is permitted to attend and comment at the meetings. Usually all agencies and utilities that could be potentially affected by the subdivision are notified of the meeting. Meetings before the Board of Supervisors also afford the public opportunities to comment on proposals. Public input into the development of the Construction Site Stormwater Ordinance and review of construction sites will be encouraged as part of the public involvement/participation program described in

	Tables 2.1 and 2.2.
Part V.B.4.e.v. & vi.	A list of measurable goals, dates activities are scheduled to begin, and dates goals are expected to be achieved are presented in Table 4.1.
Part V.B.4.e.vii.	The County Hydrologist, Ted Smith, has the principal responsibility for coordinating and overseeing construction site runoff control activities. He may delegate part or all of this responsibility to other County staff.

5. Post-Construction Stormwater Management in New Development and Redevelopment

Table 5.1 Post-Construction Stormwater Management: BMPs and Measurable Goals				
Permit Citation	BMP	Measurable Goal(s)	Start Date	Target Date Achievement
Part V.B.5.a. & b.	The County will investigate methods or designs which have been applied around the Southwest to offset the post-construction runoff effects caused by increases in the percentage of impervious area and reductions in overall vegetative cover. The County will also evaluate the BMPs that are currently in place to assess their performance.	<ul style="list-style-type: none"> Methods or designs to be enforced will have been shown to work in Flagstaff's climate and soils. Methods or designs can be selected or proposed that appear to work well where space is limited, where slopes are steep and where they are flatter, and where maintenance costs and amount of maintenance is important. 	1/04	7/04
			7/04	12/04
Part V.B.5.c. & d.	The County will develop and adopt a Post-Construction Stormwater Ordinance that will address post-construction Stormwater quality for new development and redevelopment projects.	<ul style="list-style-type: none"> Through the Ordinance, the County will have the authorization to review site plans and enforce long-term maintenance strategies. The County will have the enforcement authority to ensure compliance if post-development controls are not constructed as designed and fail to minimize runoff impacts to water quality. The County will educate developers about the long-term maintenance requirements during pre-construction meetings. At the time of NOT submittals, the County will require operators to sign a letter agreeing that BMPs will be maintained. If the property is sold, the former owner must sign a statement that the new owner is aware of the long-term BMP maintenance requirement. 	6/05	12/07
			6/05	12/07
			7/04	6/05
			6/05	12/07

5. Post-Construction Stormwater Management in New Development and Redevelopment

Table 5.2 Post-Construction Stormwater Management: Additional Information	
Permit Citation	Plan
Part V.B.5.e.i.	The County will evaluate methods or designs that are being used in the region to control post-construction runoff time of concentration, peak flows and water quality impacts. The County will also evaluate existing BMPs in the Flagstaff area to determine which designs appear to be working and in what site conditions they work. From these studies, the County will develop the post-construction runoff control criteria that will be incorporated in the County design standards.
Part V.B.5.e.ii.	The County will develop a Post-Construction Stormwater Ordinance that will address runoff from new or redevelopment projects. The Ordinance would give the County the authority to require, at the site plan review stage, the installation of BMPs that will minimize runoff impacts on water quality in the long term. The Ordinance would require the use of an approved list of non-structural and structural BMPs; would provide for post-construction or post-NOT site inspections; would give the County the authority to require the operator to fix BMPs that are not properly working or were improperly constructed; would support fines as an enforcement measure; would require the operator to sign a long-term BMP maintenance agreement; and would make as a condition of the sale of a developed property, the transfer of the long-term BMP maintenance agreement to the new owner.
Part V.B.5.e.iii.	The County will initiate an inspection program, based on performance objectives for the approved structural or non-structural BMP controls. The inspection program will ensure that the controls are constructed as planned and that they are maintained in the long term. The inspection program as an enforcement measure will be a part of the Post-Construction Stormwater Ordinance language.
Part V.B.5.e.iv.	The County will update its design standards to include allowable controls for the long-term protection of water quality. The County will involve the general public, contractors, developers and architects in the development of allowable controls and will provide education and training on the Ordinance and the updated design standards through the Public Education and Outreach and Public Involvement/Participation Programs. The County will also educate developers, contractors and architects through written materials and copies of the Stormwater Permit that will be made available at the Public Works, Community Development and Administration offices. Portions of the pre-site development meetings will also be devoted to educating the above-referenced stakeholders.
Part V.B.5.e.v. & vi.	A list of measurable goals, dates activities are scheduled to begin, and dates goals are expected to be achieved are presented in Table 5.1.
Part V.B.5.e.vii.	The County Hydrologist, Ted Smith, has the principal responsibility for coordinating and overseeing the development, implementation and enforcement of post-construction Stormwater management. He may delegate part or all of this responsibility to other County staff.

6. Pollution Prevention/Good Housekeeping for Municipal Operations

Table 6.1
Pollution Prevention/Good Housekeeping: BMPs and Measurable Goals

Permit Citation	BMP	Measurable Goal(s)	Start Date	Target Date Achievement
Part V.B.6.a.i & ii.	The County will review its existing policies and documents related to pollution prevention and develop revised procedures as needed to help promote additional awareness of good housekeeping and pollution prevention on the part of the County in the maintenance of roads and road drainage ditches. The County does not operate or own any buildings, parking lots, maintenance and storage yards, waste transfer stations, fleet maintenance shops, salt and sand storage locations or snow disposal areas within any of the 21 discrete SMS4s falling under County jurisdiction within the Flagstaff Urban Area.	<ul style="list-style-type: none"> The County Public Works Department has implemented the recycling of batteries, the burning of all their used oil for the heating of their facility, the land farming of material on which diesel spills have occurred, and the double encasing of fuel tanks. 	3/03	12/07
		<ul style="list-style-type: none"> Revisions to the County Pollution Prevention Plan will principally address minimizing pollution and erosion/sediment transport while conducting maintenance on County maintained roads, streets and road drainage ditches. 	3/03	10/03
		<ul style="list-style-type: none"> In-house training on pollution prevention measures will be given to the road maintenance personnel during their annual training. 	10/03	12/07
Part V.B.6.a.iii.	The County will identify roadways needing road surface, shoulder and/or drainage ditch repair and will conduct these maintenance operations in a manner that will minimize water pollution impacts.	<ul style="list-style-type: none"> As the County is conducting road drainage ditch repair and clean out, if measurable excess material is produced, it will be transported back to the County yard, stored and sieved, and then reused on road or shoulder repairs where extra material is required. 	3/03	12/07
		<ul style="list-style-type: none"> The County will encourage trash clean up from the roadways in the SMS4s as part of their Public Outreach and Involvement Program. 	6/04	12/07

6. Pollution Prevention/Good Housekeeping for Municipal Operations

Table 6.2
Pollution Prevention/Good Housekeeping: Additional Information

Permit Citation	Plan
Part V.B.6.b.i.	The following municipal operations impacted by this operation and maintenance program are: The County Department of Public Works The County Community Development Department
Part V.B.6.b.ii.	The employee training will include aspects of the revised County Pollution Prevention Plan that is to be developed by County staff. Training will be conducted on a annual basis.
Part V.B.6.b.iii. & iv.	A list of measurable goals, dates activities are scheduled to begin, and dates goals are expected to be achieved are presented in Table 6.1
Part V.B.6.b.v.	The County Hydrologist, Ted Smith, has the principal responsibility for coordinating and implementing County employee Stormwater training and pollution prevention activities. He may delegate part or all of this responsibility to other County staff.

Qualifying State or Local Program

The County has developed new best management practices in response to the need to apply for a municipal stormwater discharge permit. The County is not aware of any qualifying local or state programs that would address the requirements of the SMS4 General Permit.

Sharing Responsibility

The County will have the responsibility to implement all measures within this SWMP. The County may partner with the City of Flagstaff on some aspects of the public education and outreach; however, this in no way implies any responsibility on the part of the City for the implementation of the County SWMP.

Reviewing and Updating the SWMP

The County will review the SWMP in June of each year starting in June 2004, and will evaluate the implementation status of the SWMP components as well as the effectiveness of each component or combination of components. The County will determine if and how the SWMP needs to be revised. Should the SWMP require revision, the County will notify ADEQ of any additions and/or replacements. The County will submit to ADEQ any revisions with an explanation of why the practice is ineffective and why the replacement is expected to better achieve the goals of the management practice.

Monitoring

The County will evaluate program compliance, the appropriateness of identified BMPs, and progress towards achieving identified measurable goals. The County's discrete SMS4s drain to the Rio de Flag. At present, a total maximum daily load has not been established for this receiving stream. Neither the Rio de Flag or the reach of the Little Colorado River it is confluent with are listed as impaired waters and they are not on Arizona's 303(d) list. Therefore, the County will not sample and analyze discharges from the SMS4s that are under County jurisdiction.

Annual Reports

The County will submit an annual report to ADEQ by September 30, 2004 for the period of time between March 30, 2003 and June 30, 2004. Starting in 2005, the County will submit additional annual reports by September 30 of each year for the preceding period of July 1 through June 30. The County will report on the information required in Part V.G. of the Permit.